

Candidate supervisor's information summary form

Name and surname, degree, title: Marek Kieliszek, Prof. SGGW	
Scientific discipline/ disciplines	food and nutrition technology, biotechnology, microbiology
Professional development (degrees and titles) in chronological order	<p>2022 University Professor, Institute of Food Sciences, Warsaw University of Life Sciences</p> <p>2019 Habilitation, Institute of Food Sciences (previously: Faculty of Food Sciences), Warsaw University of Life Sciences</p> <p>2015 Ph.D. engineer, Institute of Food Sciences (previously: Faculty of Food Sciences), Warsaw University of Life Sciences</p>
Most important publications/ patents in the last 3 years (maximum 10)	<ol style="list-style-type: none"> 1. Hyrslova I., Kana A., Nesporova V., Mrvikova I., Doulgeraki A. I., Lampova B., Duskocil I., Musilova S., Kieliszek M., & Krausova, G. (2024) In vitro digestion and characterization of selenized <i>Saccharomyces cerevisiae</i>, <i>Pichia fermentans</i> and probiotic <i>Saccharomyces boulardii</i>. Journal of Trace Elements in Medicine and Biology, 83, 127402. 2. Kieliszek M., Piwowarek K., Kot A. M., Wojtczuk M., Roszko M., Bryła M., & Trajkovska Petkoska A. (2023) Recent advances and opportunities related to the use of bee products in food processing. Food Science & Nutrition, 11(8), 4372-4397. 3. Kieliszek M., & Sandoval S. N. S. (2023) The importance of selenium in food enrichment processes. A comprehensive review. Journal of Trace Elements in Medicine and Biology, 127260. 4. Piwowarek K., Lipińska E., & Kieliszek M. (2023) Reprocessing of side-streams towards obtaining valuable bacterial metabolites. Applied Microbiology and Biotechnology, 107(7), 2169-2208. 5. Kieliszek M., & Bano I. (2022) Selenium as an important factor in various disease states-a review. EXCLI journal, 21, 948. 6. Kieliszek M., Bano I., & Zare H. (2022) A comprehensive review on selenium and its effects on human health and distribution in middle eastern countries. Biological Trace Element Research, 200(3), 971-987. 7. Jach M. E., Serefko A., Ziaja M., & Kieliszek M. (2022) Yeast protein as an easily accessible food source. Metabolites, 12(1), 63. 8. Kieliszek M., Dourou M. (2021) Effect of selenium on the growth and lipid accumulation of <i>Yarrowia lipolytica</i> yeast. Biological Trace Element Research, 199(4), 1611-1622. 9. Kieliszek M., Pobiega, K., Piwowarek, K., & Kot, A. M. (2021) Characteristics of the proteolytic enzymes produced by lactic acid bacteria. Molecules, 26(7), 1858. 10. Kot A. M., Kieliszek M., Piwowarek K., Błażej S., & Mussagy C. U. (2021) <i>Sporobolomyces</i> and <i>Sporidiobolus</i>—non-conventional yeasts for use in industries. Fungal Biology Reviews, 37, 41-58.
Experience in work with doctoral students (defended doctoral dissertations, initiated doctoral programmes/procedures) in chronological order	November 19, 2021 - Resolution of the Discipline Council of Food and Nutrition Technology of the Warsaw University of Life Sciences - regarding confirmation of the supervision of M.Sc. eng. Wioletta Sęk and M.Sc. eng. Vitaliy Kolotylo.

<p>Project/grants achievements (in the last 10 years)</p>	<ol style="list-style-type: none"> 1. Project Preludium Bis-2, 2020/39/O/NZ9/00639, National Science Center, "The effect of selenium and anhydrobiosis on the physiological activity of yeast cells" 2. Project Miniatura 2017/01/X/NZ9/00339 (12/09/2017-11/10/2018), National Science Center, "The influence of selenium on the assessment of the activity of the antioxidant system of yeast cells" 3. Project 505-10-092800-Q00349-99 (2018-2019), "Proteomic analysis of selenium proteins isolated from yeast strains" 4. Project 505-10-092800-N00287-99 (2016-2017), "Studies on the bioaccumulation of selenium from aqueous Na₂SeO₃ solutions by the yeast <i>Candida utilis</i> ATCC 9950 using glycerol and waste potato juice water as components of the culture medium" 5. Project 510-01-ZM-02 (2014), "Production of extracellular proteolytic enzymes by selected strains of <i>Lactobacillus</i> bacteria depending on the nitrogen source in the medium and the use of experimental statistics" 6. Project 500-01-ZM-04 (2014), "Assessment of the suitability of lactic acid bacteria and yeast strains for the production of a health-promoting product - bee bread" 7. Project 505-10-092800-A-01135-99 (2012-2013), "Studies on the bioaccumulation of selenium ions by the cell biomass of the feed yeast <i>Candida utilis</i> ATCC 9950" 8. Project OPI, UDA-POIG.01.03.02-00-011/10 (2011-2015), "Patent protection of an invention concerning a strain of yeast and a method of obtaining a dried preparation of this yeast, guaranteeing the preservation of technological features enabling the fermentation of worts (honey) with high sugar concentrations" 9. Project OPI, UDA-POIG.01.03.02-00-014/10 (2011-2015), "Patent protection of an invention regarding strains and a method of obtaining a health-promoting product based on flower pollen and bee honey"
<p>Topic – research problem – for which the candidate supervisor seeks a doctoral student</p>	<ol style="list-style-type: none"> 1. Molecular studies of the evolutionary adaptation of yeast to changing stress conditions 2. Study on the influence of selenium on physiological functions and metabolism of lipolytic yeast cells
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